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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,599	02/06/2002	Norio Kashiwa	ZU-408	5429
21839	7590	10/15/2004	EXAMINER	
BURNS DOANE SWECKER & MATHIS L L P			LEE, RIP A	
POST OFFICE BOX 1404				
ALEXANDRIA, VA 22313-1404			ART UNIT	PAPER NUMBER
			1713	
DATE MAILED: 10/15/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/066,599

Applicant(s)

KASHIWA ET AL.

Examiner

Rip A. Lee

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 7-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This office action follows a request for continued examination (RCE) under 37 § C.F.R. 1.114, filed on July 27, 2004, in which claims 1-3 were amended.

Claim Rejections - 35 USC § 102 & 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1, 2, 7, and 8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. Patent No. 5,278,272 to Lai *et al.* for the same reasons set forth previously.

Lai *et al.* teaches ethylene polymers having a density of from about 0.85 to about 0.97 g/cm³, a melt flow ratio, I_{10}/I_2 of from about 7 to about 20, and a molecular weight distribution, \bar{M}_w/\bar{M}_n from about 1.5 to about 2.5 (col. 3, lines 4-14). These values lie squarely within the ranges set forth in present claims 1 and 2. Fabricated articles made from the inventive olefin polymers may be prepared using all of the conventional processing techniques such as sheet extrusion or injection molding (col. 15, lines 21-25 and 40-44).

Claims 1 and 2 is presented in product-by-process form. It is well settled that where product by process claims are rejected over a prior art product that appears to be the same, the burden is shifted to the Applicant to establish an unobviousness difference, even if the production processes are different.^{1,2} Furthermore, the patentability of a product claim rests on the product formed, not on the method by which it was produced.³

3. Claim 3 is rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. Patent No. 6,300,433 to Rodriguez *et al.*

As indicated previously, Rodriguez *et al.* teaches polymerization of ethylene polymers using catalysts comprised of hafnocene complexes and boron containing activator. Ethylene polymers have a density of 0.850-0.930 g/cm³ (claim 1). It can be seen from Tables 1 and 2 that value of M_w/M_n lie in the range of about 2.22 to about 9.39. Note that ethylene polymers exhibit density and M_w/M_n whose values lie squarely within the ranges set forth in present claim 3. The reference is silent with respect to the ratio ω_2/ω_1 . In view of the fact that the polymers described in Rodriguez *et al.* are prepared by catalysts comprised of essentially the same components as those described in the instant application, a reasonable basis exists to believe that the prior art polymers exhibit the currently claimed property, ω_2/ω_1 . Since the PTO can not conduct experiments, the burden of proof is shifted to the Applicants to establish an unobviousness difference.⁴

¹ *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983).

² Since it is the patentability of a product claimed, and not of the recited process steps, which must be established, a rejection based alternatively on either section 102 or section 103 of the statute is eminently fair and acceptable in cases where the prior art discloses a produce which reasonably appears to be either identical with or only slightly different than a product claimed in a product-by-process claim. *In re Brown*, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972). See also MPEP § 2113.

³ *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

⁴ *In re Fitzgerald*, 619 F.2d. 67, 205 USPQ 594 (CCPA 1980). See MPEP § 2112-2112.02.

4. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriguez *et al.*

Rodriguez *et al.* does not indicate that polymers of the invention are made into molded articles. However, it would have been obvious to one having ordinary skill in the art to make molded articles from ethylene polymers in order for the polymer to have utility. One having skill in the art would have found this obvious because the background art section of the patent provides a general discourse on uses of thermoplastics (col. 1, lines 26-30):

“Uses of plastomers include thermoplastic olefins, films, wire and cable coatings,
polymer modification, injection molding, foams, footwear, sheeting...”

Therefore, it is deemed that the skilled artisan would have found it obvious to make materials by injection molding since it is described in the reference.

5. Claim 3 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over EP 612 768 to Hasegawa *et al.*

The prior art of Hasegawa *et al.* relates to a process for producing ethylene/ α -olefin copolymer in the presence of a catalyst derived from a hafnocene and a borate activator (Example 5). The resulting polymer has a density of 0.919 g/cm³. The reference is silent with respect to the ratio M_w/M_n and ω_2/ω_1 . However, in view of the fact that the polymers described in Hasegawa *et al.* are prepared by catalysts comprised of essentially the same components as those described in the instant application, a reasonable basis exists to believe that the prior art polymers exhibit the currently claimed

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properties. Since the PTO can not conduct experiments, the burden of proof is shifted to the Applicants to establish an unobviousness difference.⁴

Information Disclosure Statement

6. The three information disclosure statements (IDS) submitted on March 31, April 26, and May 17, 2004 have been entered into the record. Initialized copies accompany this office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (571)272-1104. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (571)272-1114. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <<http://pair-direct.uspto.gov>>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

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October , 2004



DAVID W. WU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700